

The Kathleen A.P Mathias Agriculture Energy Efficiency Program (Mathias Ag Program) Application Information Q&A

Is this program for me?

Preparing Your Application

Application Review & Next Steps

What You Should Know about Compliance

Is this program for me?

1) Who is eligible for this program?

Farms and businesses in the agriculture sector may apply. Examples include Dairy, Orchard, Poultry/egg, Greenhouse, Vegetable, Livestock, Vineyard, Grain dryer, Processor, Sawmill, and Aquaculture. If you are uncertain about your eligibility, call [EnSave](#) at (800) 732-1399 to see if you meet the definition.

To be eligible, you will also need to show how implementing allowable energy efficiency measures will achieve at least a 15% energy savings in the building(s) you plan to upgrade. This can be a combination of measures from our approved measure list. Refer to the example in question #11 to see how projects can be combined to reach 15% energy savings.

- The funding source for this program, the U.S. Department of Energy's (DOE) Better Buildings program, emphasizes a "whole building" approach by retrofitting existing buildings for energy efficiency, energy security, and affordability. This approach is different from typical energy efficiency upgrades which focus on an individual measure replacements gain in efficiency. Using this whole building approach it is anticipated that multiple measures may be required to achieve at least a 15% savings for the building in which they are implemented.
- In some circumstances an individual measure may be allowed, provided it meets the other criteria. Such an example would be a grain dryer or irrigation system where there is no building involved. If the measure that you wish to upgrade is not attached to or is not a part of any building then it can qualify as a "standalone" measure. It will still need to have an expected cost of \$25,000 - \$200,000 (see #2) and have at least a 15% energy savings. You can also apply with a standalone project and a building project.

2) What size project can apply for a grant?

Your project must cost at least \$25,000 in order to apply for this grant. There is no maximum project size, although the maximum grant is \$200,000.

3) If I receive a grant award, how much money should I plan on spending out of pocket?

All awards will be after any other incentives have been applied. Of this final amount, MEA will grant up to 75%. For example:

- \$50,000 EE project - \$10,000 utility incentive = \$40,000 project cost
 - \$40,000 – \$30,000 (assume 75% Mathias Ag Program rebate) = \$10,000 out-of-pocket cost

Note: The 75% Mathias Ag Program grant applies to the applicant's net costs, after utility or other incentives. Any additional funding that comes in after selection for the Mathias Ag Program program must be deducted from the program project cost or used to enlarge the scope of the energy efficiency project.

4) Does the grant come with strict federal compliance requirements?

Yes. The Mathias Ag Program offers an excellent opportunity for motivated applicants to realize significant long-term energy savings, but applicants should be prepared to work cooperatively with MEA at each step of the process to assure all federal requirements are met. See the "What you should know about compliance" section for details on the requirements and the support available to help you meet them.

5) What does "MEA will showcase these projects as case studies within the agriculture sector" mean?

The intent here is to help other farms and businesses like yours see a "real life" example of the energy and money saving potential of energy efficiency improvements and share information about your project with those who would be interested in the information. Information gathered would include project details such as:

- How much it cost
- How long it took
- The energy savings
- The simple payback
- The leveraged funds

We may provide this information on MEA's web site, and MEA or [EnSave](#) may ask your permission to use your project as the subject of a success story for a newsletter, web site, or other marketing vehicle. MEA will need to perform monitoring visit(s) to provide technical assistance and ensure the project requirements were fully satisfied (see "Who will be visiting my farm or business?" below). Otherwise you will NOT need to open your farm/business to allow individuals to view and inspect your project(s). Beyond the required monitoring and project visits mentioned above, "showcase and case study" will entail only a written account of your project(s).

6) How will projects be selected?

These factors will be weighed in the selection of projects eligible for grant funding:

- *Project Feasibility – Can the project be completed in the available construction window (by April 1, 2013)? Will it result in a minimum 15% energy savings? Does the monthly project spending plan include reasonable milestones that ensure expenditure of project funds?*
- *Energy Savings – How high are the likely energy savings from the proposed measure?*
- *Simple Payback – How many years will it take to recover the cost of the investment without incentives? (Project cost divided by annual energy savings in dollars. For example: a project saving 400,000 kWh per year at \$0.10 per kWh and a \$50,000 project cost has a simple payback of 1.25 years. $\$50,000/\$40,000=1.25$)*
- *Amount of matching (leveraged) funds – Is the applicant tapping additional funding sources to maximize the value of this grant?*
- *Accuracy of energy savings and cost information for the project –Are assumptions behind the numbers clearly stated, to enable the Mathias Ag Program team to evaluate the project (i.e. make and model numbers, efficiency ratings, operational schedules)?*

- *Best Practices – Showcase project – MEA is looking for projects that demonstrate energy efficiency best practices in various capacities in order to expand energy efficiency in the agriculture sector.*

MEA also reserves the right to select applications that allow for a broad diversity in the project portfolio. Factors such as measure type, geographic region and agricultural market will be considered.

Preparing Your Application

7) I want to take advantage of this opportunity, but I am not an energy expert and am not sure how to figure out my savings or efficiency options. Is there help for this?

Yes, prior to applying you should contact [EnSave](#) at 800-732-1399 for application or technical assistance. They can help you determine whether you have a project that will meet the program's requirements.

Accuracy is very important to the review team, as we will only have your application and supporting documentation to use in evaluating the merits of your project before provisionally awarding funding. Since technical and application assistance is available through EnSave at no cost to you, we encourage you to take advantage of this service in order to provide the best possible application.

8) What does “accuracy” mean when it comes to preparing my application?

The review team will use the following energy-related metrics to evaluate your application:

- Percent of savings (need to know total and proposed energy use for the project)
- Type of measure (need to identify the type of measure; make and model numbers are helpful)
- Simple payback (need to know energy savings of project, total project cost, and cost per unit of energy as reflected in your utility bills)

To help you provide the best possible information, we offer here some examples of less accurate and more accurate data for some key application questions.

Section B, Question 2 of Application: Existing Equipment Description

Less Accurate: Description of location and number and type of existing lighting fixtures

More Accurate: Description of location and number and type of existing lighting fixtures PLUS operating schedule of lighting and wattage

Section B, Question 3: Describe the Proposed Project

Less Accurate: Description of lighting replacement (100 12-watt LEDs)

More Accurate: Description of lighting replacement PLUS make and model number and a specification sheet from the manufacturer.

Section D: Estimated Project Costs and Savings

Less Accurate: Stating project cost and savings without documentation or without taking advantage of available technical assistance to arrive at the energy savings.

More Accurate: Call EnSave to request assistance with estimating energy savings. For the cost estimate, provide a source. If you received a quote from a contractor, include the quote. If you found equipment costs in a catalog or online, include that information in your application so we can validate the information.

9) I only have one meter for my entire operation. How do I figure out the energy used in the building containing my project?

EnSave can help determine this and will ask a series of questions on a case-specific basis.

10) Where do I find a list of eligible equipment?

A list of approved measures can be found in Section F of the application.

11) What are some examples of projects that are likely to qualify and projects that will not qualify?

All projects must achieve at least 15% energy savings (see #1). Higher consideration will also be given to projects with a shorter simple payback period.

Below is an example of a building on a dairy farm that proposed replacing four different measures to meet the 15% building energy savings requirement:

Benefits of Recommended Energy Saving Equipment

Equipment	Estimated Annual Electricity Savings (kWh)	Estimated Annual Fuel Savings (gallons)	Estimated Cost to the Farm	Estimated Annual Energy Cost Savings	Estimated Payback in Years
Water Heating	93,539		\$9,600	\$8,512	1.1
Lighting	140,504		\$25,380	\$12,786	2.0
Milk Cooling	46,510		\$8,560	\$4,232	2.0
Motors	14,449		\$2,800	\$1,315	2.1
Totals	295,002	0	\$46,340	\$26,845	1.7

Here are the energy savings associated with this project:

Fuel Type	Current Usage	Current Use (MMBtu)	Savings	Savings (MMBtu)	% Savings
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Electricity (kWh)	1,947,427	6,647	295,002	1,007	15.1%
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Below is an example of a dairy farm building project that didn't initially qualify because it had not achieved the 15% energy savings that is required followed by an example where it used photovoltaic solar (PV) to meet the 15% energy savings requirement:

Benefits of Recommended Energy Saving Equipment

Measure	Est. Annual Electricity Savings (kWh)	Energy Savings (MMBtu)	Est. Cost to Location	Est. Annual Cost Savings	Est. Payback (Years)
Refrigeration: Milk Cooling	113,219	386	\$8,560	\$11,039	0.8
Hot Water	139,851	477	\$14,400	\$13,636	1.1
Milk Harvest	143,831	491	\$19,800	\$14,024	1.4
Lighting	89,304	305	\$10,308	\$8,707	1.2
Other Motors and Pumps	12,362	42	\$7,400	\$1,205	6.1
Totals	498,567	1,701	\$60,468	\$48,611	1.2

The project is estimated to only reach 13% savings:

Fuel Type	Current Usage	Current Use (MMBtu)	Savings	Savings (MMBtu)	% Savings
Electricity (kWh)	3,807,808	12,996	498,567	1,701	13%

Perhaps this building could have added additional energy efficiency measures to gain the required 2%. In fact, it is possible that removing the pump and motor upgrades and installing other measures with better paybacks could meet the 15% energy savings requirement while improving the estimated payback – which would make the application stronger. The whole building approach encourages this kind of measure consideration.

The emphasis of this grant is on energy efficiency. However, photovoltaic solar (PV) is allowed when used in conjunction with an energy efficiency upgrade(s). The example below shows how the above building (estimated 13% savings) could reach 15% savings by installing a photovoltaic (PV) system to offset the at least 2% savings that is needed:

Measure	Est. Annual Electricity Savings (kWh)	Energy Savings (MMBtu)	Est. Cost to Location	Est. Annual Cost Savings	Est. Payback (Years)
Refrigeration: Milk Cooling	113,219	386	\$8,560	\$11,039	0.8
Hot Water	139,851	477	\$14,400	\$13,636	1.1
Milk Harvest	143,831	491	\$19,800	\$14,024	1.4
Lighting	89,304	305	\$10,308	\$8,707	1.2
Other Motors and Pumps	12,362	42	\$7,400	\$1,205	6.1
60 kW Fixed Panel PV system	74,675	255	\$270,000	\$7,281	37.1
Totals	573,242	1,956	\$330,468	\$55,892	5.9

The photovoltaic (PV) system pushes this project into the eligible range:

Fuel Type	Current Usage	Current Use (MMBtu)	Savings	Savings (MMBtu)	% Savings
Electricity (kWh)	3,807,808	12,996	573,242	1,956	15.1%

12) Are renewable energy projects allowed?

Not as “stand-alone” projects. For instance, photovoltaic solar (PV) is allowed if it is installed in conjunction with energy efficiency measures as in the above example. PV systems are subject to the NEPA requirements, which is 60 kW or less within the existing facility. The PV does not need to be grid-tied or tie-in to the building (e.g., a pump can be stand-alone with the PV displacing diesel). The PV can be installed anywhere, as long as it is within the facility boundaries of the farm. Such hybrid projects (PV + energy efficiency) will potentially negatively affect the cost and payback, but they could also help achieve the 15% requirement (see #11 example). 100% renewable projects will not be funded.

13) Do I need an audit to apply?

If you are able to adequately state your expected savings, then you don’t need an audit. At a minimum you will need to know how much energy your building uses annually (this could be based on previous years’ bills), how much energy the equipment you would like to replace uses, and how much energy the planned replacement will use.

14) What if I don’t have one year’s worth of utility bills?

If you do not have these records, your utility history can be obtained from your utility provider. Your utility may have a form you need to fill out in order to provide that information to you.

15) What is a DUNS number, how do I get one, and is there a fee?

A DUNS number (for Data Universal Numbering System) is a unique 9-digit identifier issued and maintained by Dun & Bradstreet (D&B) that verifies the existence of a business entity. You can obtain a DUNS number by phone or through D&B's website. Typical turnaround time for a web request is one business day. An authorizing official of the organization should request a DUNS number. The following is a list of the information you will need in order to obtain it:

- Name of organization
- Organization address
- Name of the CEO/organization owner
- Legal structure of the organization (corporation, partnership, proprietorship)
- Year the organization started
- Primary type of business
- Total number of employees (full and part time)

Contact Dun & Bradstreet

- Phone: **866-705-5711**
- Website: <http://fedgov.dnb.com/webform/displayHomePage.do>

Obtaining a DUNS number is FREE for all federal grant and contract applicants.

Application Review & Next Steps

16) What happens after I submit my application?

The Mathias Ag Program team will rank your application along with others. We will make one of four determinations for your project:

- a. Provisionally accept your project, and require additional information to calculate the energy savings.
- b. Provisionally accept your project, and require an on-site comprehensive energy audit to calculate the energy savings.
- c. Reject your project if it does not meet baseline criteria such as 15% energy savings.
- d. Place your project on a waiting list in the event another selected project is not formally approved.

17) What is the process if my application is selected?

If your application is selected, MEA will send a commitment letter that:

- Explains the next steps in calculating energy savings;
- Authorizes you to solicit bids for your project, with guidance on how to issue a fully compliant bid request;
- Provides instructions about meeting various preliminary project requirements within a prescribed time window.

When energy savings are verified, a viable bid is secured, and the preliminary requirements are met, MEA will issue the award, provide a contract for signature, and formally approve the project. *You must*

not sign a contract with a bidder or start work until you have received final approval to proceed. Doing so will jeopardize your grant award.

18) If selected, I would like to use my usual contractor to complete the project. Why do I have to go through a bid process?

To meet the federal requirements that govern this program. The bid process is designed to provide minority and disadvantaged business enterprises an opportunity to respond. It also assures that the bid request exactly matches the scope of the approved project, that the selected bidder does not appear in the Excluded Parties List System (EPLS), and that the contractor is fully apprised of their responsibilities in relation to the federal requirements.

19) If my project is rejected, what other funds are available?

The Mathias Ag Program team wants to help all applicants, including those who are ineligible for program funds. If you have an energy efficiency project that we cannot fund, we will help you access other possible funding sources such as utility programs, MARBIDCO financing, and USDA programs.

What You Should Know about Compliance

20) What are the ARRA Special Terms and Conditions?

The American Recovery and Reinvestment Act (ARRA) of 2009 appropriates funding for the Department of Energy (DOE) to award formula-based grants through initiatives such as the Mathias Ag Program. The ARRA Special Terms and Conditions are the federal requirements associated with ARRA grants (also commonly referred to as stimulus grants). The following are some of the key federal requirements associated with the Mathias Ag Program:

- NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) Allowable Measures
- Waste Management
- Historic Preservation
- Davis-Bacon Wages
- Certified MBE and/or DBE Firms
- Signage

These requirements *flow down*, or are passed down each time a sub-award occurs. Every time the grant funds are shared, applicable special terms and conditions are passed on. The provisions have flowed down to the MEA, will flow down to MEA grantees, and will flow down to grantees' contractors and subcontractors who perform the upgrades.

21) I have heard about these requirements and they sound like a bother. Why would I apply for this grant?

The MEA well understands the apprehension associated with the requirements for this funding source. We have been managing grants with these requirements throughout Maryland for the last three years. Along the way we have developed some *best practices* that ensure grantees are in compliance. We have developed well-trained experts for these requirements, and each farm/business that receives an award will be assigned a compliance coordinator to assist you in your efforts to meet the grant's terms and conditions. We have helped guide numerous projects throughout Maryland to successful completion with this method. Grantees work closely with us, and we let them know what they need to do each step of the way to meet compliance. We want all the Mathias Ag Program projects to be great accomplishments of benefit to all of us.

22) Who will be visiting my farm or business?

If you will receive an audit, a qualified energy auditor contracted with MEA will come to your farm or business to collect information needed to determine energy savings. MEA or its contractors may also visit your site to perform a post-installation site inspection of your project, or to install data loggers needed for measurement and verification activities. During one of these visits, photos may be taken that will be used in promotional materials to showcase your commitment to energy efficiency.

In all cases, MEA or contractors will call first to make an appointment before arriving on site, and will heed any of your safety or biosecurity requirements. All personnel visiting your facility will be fully insured. Participation in the program requires you to grant MEA or its representative(s) permission to use photos of your farm or facility, as well as data presented in your final energy evaluation or audit report for marketing, publicity, and advertising purposes, Subject to the requirements of the Maryland Public Information Act, § 10-611 et seq. of the State Government Article, MEA and its representatives will not divulge any confidential information or trade secrets. You have the right to review and approve any photos taken of your facility.